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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/992,708

11/19/2001

Glen D. Caby

1023-011US01

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01/25/2006

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EXAMINER

MULLEN, KRISTEN DROESCH

ART UNIT

PAPER NUMBER

3766

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,708

Applicant(s)

CABY ET AL

Examiner

Kristen Mullen

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/30/05 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 and 23-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 15-22 and 29-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/30/05 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 40-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 40-41 each recite the limitation "the system control module" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-7, 15-21, 29-30, 32, and 34-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (6,547,730) as evidenced by Rosenberg (5,734,373), Takinosawa (2003/0035473), Pasumansky (6,826,639) and Fensore (6,415,343).

Regarding claims 1, 15, Lin shows a method and processor readable medium containing instructions comprising: transmitting a USB token packet to a first module (first internal processing device) within a medical device (ultrasound imaging system) via an internal bus within the medical device (ultrasound imaging system); when the first module (first internal processing device) has a data packet to transfer, receiving the data packet from the first module (first internal processing device); and transferring the data packet to a second module (second internal processing device) within the medical device using a USB protocol (Claims 12, 15, 18). Rosenberg shows that USB protocol includes a token packet followed by a data packet, which is followed by a handshake packet (Col. 45, lines 5-11).

With respect to claim 29, Lin shows a device comprising: a system control module (208), within the medical device (ultrasound imaging system) a plurality of functional modules (204, 206) within the medical device (ultrasound imaging system); and a system bus (202) within the medical device (ultrasound imaging system) coupled to the system control module and to the

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plurality of functional modules, the system bus arranged to transfer data packets between the functional modules and the system control module according to a USB protocol (Col. 5, lines 15-29, and 40-59; Fig. 2; Claims 12, 15, 18).

Regarding claims 2, 16, and 38, Takinosawa shows that encoding data packets utilizing a NRZI encoding scheme is a component of USB protocol (Para. 0025).

With respect to claims 3, 17, and 39, Pasumansky shows USB protocol includes control, isochronous, interrupt, and bulk transfer modes (Col. 1, line 62-Col. 2, line 34).

Regarding claim 4, and 18, Pasumansky shows USB protocol dictates that when one module does not have a data packet to transfer, it sends a indication to the second module which is received by the second module (Col. 1, line 62-Col. 2, line 34).

With respect to claims 5, 19, and 40, Fensore shows USB protocol includes assigning addresses to each module (Col. 1, lines 57-60)

Regarding claims 6, 20, and 41, Lin shows associating at least one pipe (202) with each of the first and second modules (Fig. 2).

With respect to claims 7, 21, 30, 32-33 and 34, Lin shows the medical device comprises at least one of a user interface module (210) communicatively coupled with a keyboard and a patient parameters module (204) (Fig. 2).

Regarding claim 35, Lin shows the patient parameters module (204) is configured to obtain at least one of vital sign measurements.

With respect to claims 36-37, Lin shows the plurality of functional modules comprises an expansion module (208) comprising a simple device to communicate data with at least one device external to the medical device system (Fig. 2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 22, 31, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (6,547,730) as applied to claims 1, 15 and 29 above, and further in view of Owen et al. (6,148,233). Lin is as explained before. Although Lin fails to show the medical device is a defibrillator or the therapy control module comprises a defibrillator electrode, attention is directed to Owen et al. which shows a defibrillator with multiple modules that communicate with one another including a therapy control module including a defibrillation electrode (Fig. 8). It would have been obvious to one with ordinary skill in the art at the time the invention was made to employ the USB data transfer protocol of Lin for the communication between modules of Owen et al., wherein so doing would amount to mere substitution of one functional equivalent for another that would work equally well on the Owen et al. device.

Response to Arguments

9. Applicant's arguments with respect to claims 1-8, 15-22, and 29-42 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicants' arguments that Lin shows an external bus, the examiner disagrees. Lin does not explicitly say anywhere in the patent specification that the bus is external. To the contrary, Lin explains in claim 12 that the processing modules are internal, and

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the bus is coupled to the processing modules. Furthermore, although Fig. 3 appears to shows separate external devices, Fig. 3 is described as conceptual diagram.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen Mullen whose telephone number is (571) 272-4944. The examiner can normally be reached on M-F, 10:30 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristen Mullen
Patent Examiner
Art Unit 3766



kdm